

Bio-psycho-social factors affecting sexual self-concept: A systematic reviewRobabeh Potki¹, Tayebe Ziaei², Mahbobeh Faramarzi³, Mahmood Moosazadeh⁴, Zohreh Shahhosseini⁵

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Type of article: Systematic review**Abstract**

Background: Nowadays, it is believed that mental and emotional aspects of sexual well-being are the important aspects of sexual health. Sexual self-concept is a major component of sexual health and the core of sexuality. It is defined as the cognitive perspective concerning the sexual aspects of 'self' and refers to the individual's self-perception as a sexual creature.

Objective: The aim of this study was to assess the different factors affecting sexual self-concept.

Methods: English electronic databases including PubMed, Scopus, Web of Science and Google Scholar as well as two Iranian databases including Scientific Information Database and Iranmedex were searched for English and Persian-language articles published between 1996 and 2016. Of 281 retrieved articles, 37 articles were finally included for writing this review article.

Results: Factors affecting sexual self-concept were categorized to biological, psychological and social factors. In the category of biological factors, age gender, marital status, race, disability and sexual transmitted infections are described. In the psychological category, the impact of body image, sexual abuse in childhood and mental health history are present. Lastly, in the social category, the roles of parents, peers and the media are discussed.

Conclusion: As the development of sexual self-concept is influenced by multiple events in individuals' lives, to promotion of sexual self-concept, an integrated implementation of health policies is recommended.

Keywords: Sexual self-concept, Sexual self-perception, Systematic review

1. Introduction

Over the past 20 years, there has been an increasing emphasis on comprehensive and holistic sexual health and welfare. Nowadays, researchers and healthcare providers believe that mental and emotional aspects of sexual well-being are the important aspects of sexual health (1). Sexual self-concept is a major component of sexual health (2, 3) and forms the core of people's sexuality (4). Sexual self-concept assessment is a significant predictor of sexual behavior and can be affective in promoting mental and sexual health (5). The sex life is the most important factor in a person's life (6). Several studies have examined the role of self-concept on people's behavior. However, Sexual self-concept as one of the most important components of the self-concept is less considered (3, 7). Structural sexual

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self-concept is multi-dimensional and dynamic, which is developed based on the individual's understanding of his/her personal sexuality (1). It refers to the individual's positive and negative perceptions as a sexual creature (8, 9). The individual's understandings of sexual desires are developed based on social expectations and along with social and psychological growth and sexual schema (10). This emotional concept helps with the development of knowledge, identity and self-evaluation in the sexual life (11). Sexual self-concept originates from past experiences to present sexual experiences. It affects the process of sexual behaviors related to social information, and guides sexual behaviors (12, 13). A person's feelings about oneself as a sexual creature influences his/her sexual experiences (1). The dimensions of structural sexual anxiety, monitoring sexuality, the fear of sexual relationships and sexual depression are the negative aspects of sexual self-concept. Also, sexual self-efficacy, sexual consciousness, sexual optimism, motivation to avoid high-risk sexual relationships, self-blame in case of sexual problems, management of sexual affairs, sexual self-esteem, sexual satisfaction, prevention of sexual problems and the internal control of sexual problems are the positive dimensions of sexual self-concept. Other dimensions such as sexual preoccupation, sexual assertiveness, sexual motivation, and sexual self-schema are the situational aspects of sexual self-concept (11). Each of these dimensions can be influenced by different events and factors. The use of contraceptive methods and avoiding high-risk sexual behaviors are influenced by sexual self-concept. The negative aspects of sexual self-concept such as depression, anxiety and sexual anxiety are accompanied by less effective and reliable contraceptive methods (14). The assessment of sexual-concept is a significant predictor of individuals' sexual behavior (5). According to some studies, girls with higher levels of sexual self-esteem are more likely to remain a virgin compared with those with lower levels of sexual self-esteem (15). Therefore, addressing the positive aspects of sexual self-concept reduces high-risk sexual behaviors and increases the appropriate use of birth control and the physical, emotional and psychological well-being (16). Sexual self-concept may be affected by significant sexual events such as starting coital or non coital sexual behaviors, losing virginity (17) or a history of sexual abuse in childhood (18). Various studies show that factors such as age (17), gender (19), race (14, 20) and marital status (14) can affect the different aspects of sexual self-concept. Also, sexually transmitted diseases (21), schizophrenia and depression (22) can also affect people's sexual self-concept. The role of social factors such as mass media, parents and peers in shaping the sexual self-concept should also be considered (23). Different factors affecting sexual self-concept studies were evaluated individually, but a comprehensive study that examines bio-psycho-social factors affecting sexual self-concept, was not conducted. The aim of this study was to assess the biological, social and psychological factors affecting sexual self-concept. It is hoped that the results of this study provide some insights for health policymakers to adopt suitable strategies in order to promote peoples' sexual self-concept.

2. Material and Methods

English electronic databases including PubMed, Scopus, Web of Science and Google Scholar as well as two Iranian databases including Scientific Information Database and Iranmedex were searched for English and Persian-language articles published between 1996 and 2016. Of 281 retrieved articles, 37 articles were finally included for writing this review article. The search term combination was as follows: MeSH headings, text words and word variants for "sexual" or "self-concept" or "sexual self-concept" or "self-perception" or "sexual self-perception" or "longitudinal survey" or "cross-sectional study" and "biological factors" or "psychological factors" or "social factors". Reference lists of included studies were inspected manually to identify additional relevant articles. All original cross-sectional or longitudinal studies that reported demographic characteristics of people with a different level of sexual self-concept were retrieved. Also, the interventional studies that were conducted to improve sexual self-concept were excluded.

3. Results and discussion

Sexual self-concept is an aspect of sexuality for the description of the individual's identity (24). Sexual self-concept is the cognitive perspective on the sexual aspects of "self" and refers to the perception of a person as a sexual creature (25, 26). It is the predictor of sexual outcomes (4), and consists of intrapersonal and interpersonal aspects developed along with changes in sexual growth and experiences. The subjective interpretation of others and society, affects the formation and growth of sexual self-concept (1). Sexual self-concept is intricately linked to sexual behaviors and attitudes (27). Several factors are involved in the formation of sexual self-concept. Positive and negative aspects of sexual self-concept are affected by sexual significant events (17). Therefore, the identification of these factors is needed through addressing the positive aspects of sexual self-concept to help with the promotion of physical and psychological health. In the present study, factors affecting sexual self-concept were categorized to biological, psychological and social. In the category of biological factors, age, gender, marital status, race, disability and sexual transmitted infections are described. In the psychological category, the impact of body image, sexual

abuse in childhood and mental health history are recognized. Lastly, in the social category, the roles of parents, peers and the media are discussed.

3.1. Biological factors

Sexual self-concept is feelings, beliefs, and perceptions that people have about their sexual relationships that accordingly adjust their behaviors (5). The stabilization and improvement of the individual's understandings and perceptions as a sexual creature or sexual self-concept are created in adolescence many months and even years before the beginning of sexual relationships. The aspects of sexual self-concept become apparent in early adolescence (17).

3.1.1. Age

A biological factor affecting sexual self-concept is age. Before school age, sexual knowledge as the gender identity is shaped (12). During the teenage period, sexual self-concept is unstable and is formed when sexual maturity begins to grow (1). Older adolescents compared with younger adolescents have a more positive sexual self-concept. Following the increase in sexual experiences, negativity toward sexual issues are reduced due to an increase in sexual self-confidence. Sexual confidence slowly grows over time. Over time also, sexual anxiety is reduced and sexual self-concept is evolved, which affects the individual's future behavior (17). The result is that with increasing age, sexual self-concept is promoted (25).

3.1.2. Gender

It has been shown that gender is significantly associated with several dimensions of sexual self-concept. Women have greater sexual anxiety, fear and depression than men. Also, sexual self-esteem and optimism are lower in women than in men. Men in their first sexual experience have more pleasurable orgasms than women. However, women often believe that their first sexual experience is forced and has an abusive identity and has negative impacts on their next sexual experiences. In contrast, women tend to avoid high-risk sexual behaviors more than men (14, 28). Women's perceptions of themselves are more romantic and they like to seem sexually attractive. However, men achieve higher scores in the explicit dimensions of sexuality such as responsiveness and sexual experiences. For men, masculinity is defined as achieving high scores in experience and responsiveness and for women femininity is with high scores in romantic and sexual attractiveness (19). Although both genders are more likely to have sexual relationships and gain sexual experiences (29).

3.1.3. The marital status

Positive sexual self-concept is accompanied by extensive sexual behavior and experiences and more sexual partners in one's lifetime (27). Those who have never married are more likely to have higher sexual anxiety, less sexual assertiveness, greater sexual self-monitoring and greater sexual fear/apprehension than married individuals. Also, divorced individuals have more sexual self-efficacy, greater incentive to avoid high-risk sexual behaviors and report more fear. Also, remarried people report less sexual anxiety, less motivation to avoid risky sex, less sexual self-monitoring, less sexual fear but greater sexual assertiveness (14).

3.1.4. Race

Sexual self-efficacy, sexual self-esteem and sexual satisfaction are higher in non-African than other ethnic groups. African and African-Americans women have a unique history of slavery, exploitation and victimization in their own countries (14) and their sexuality is debated. Also, contradictory and negative implications such as hypersexual and asexual "Mammy type" can be dangerous. When sexual stereotypes are associated with the image of vixen, Jezebel and bad girl, anxiety, incompetence and sexual dysfunction appear (20). African and African-Americans women try to distance themselves from such negative images and therefore, they suppress sexuality and feel shame. Religious fanaticism and sexuality are related together especially in black women. Participation in religious activities can help with the reduction of anxiety and depression in African and African-Americans women (20).

3.1.5. Disability

According to the World Health Organization, disability is defined as physical or psychological damages to individuals that hinder them to reach independence in the social life (30). Disability affects individuals' self-esteem and sexual anxiety in women and men. There is no difference in sexual self-esteem between men and women, but in other aspects including sexual anxiety, sexual self-sufficiency, fear and depression, women achieve higher scores than men. There are no statistically significant relationships between the different degrees of disability and some dimensions of sexual self-concept. For example, higher sexual depression and lower sexual self-esteem are reported in severe disability (31). The onset age of disability is an important factor affecting sexual self-concept, because the perception of "self" is shaped and evolved from the beginning of the life. If the onset age of disability is higher, positive self-concept is dramatically reduced. Conversely, some believe that there is no relationship between the onset age of disability and an individual's self-concept. It seems that for both groups (the beginning of disability at

an early and older age) engagement in social situations affects sexual self-concept. Those people who participate in social activities have more positive sexual self-concept (32).

3.1.6. Sexually transmitted infections

Research shows that sexually transmitted diseases (STDs) such as genital herpes (HSV) and genital human papilloma virus (HPV) have negative impacts on an individual's sexuality (21). Being infected with such diseases as an important sexual event affect the different aspects of sexual self-concept (33). Individuals with HSV and HPV experience more anxiety, depression and sexual concerns than healthy ones. They have more fear of sexual relationships and have less sexual optimism, self-esteem and satisfaction (21). Women with STIs who are committed to marital life, report that their relationship is influenced by shame and stigma of the disease and are morally blamed. The sex partners of infected individuals feel worries and concerns when their spouses become aware of their diseases. Due to ethical issues, their interpersonal relationships are affected. The revelations about the diseases cause negative feedbacks and the person may even feel that she/he is rejected or judged. They do not disclose their diseases, because of the fear of rejection by their partner. Therefore, they have more anxiety and depression and less sexual self-esteem and satisfaction than those who have informed their sexual partner (21).

3.2. Psychological factors

3.2.1. Body image

Body image is the attitude and perception of the individual and others regarding his/her own appearance and the body (34). Body image is a multifaceted structure that combines individuals' understandings and attitudes about the body especially the physical appearance. This includes knowledge related to appearance (schemas), feelings and behaviors. The evaluation of body image can affect interests and experiences of the person during sexual activities. It seems that sexual self-concept is affected by women's self-perceptions (35). Dissatisfaction with body image hinders sexual behaviors and interferes in the quality of sexual experiences. In both genders, sexual performance is related to stronger sexual self-concept and less anxiety and worries about body image (36). There is a relationship between body image and sexual self-concept. Sexual self-concept intermediates between the stabilized self-body image and subjective well-being. Some of the negative effects of poor body image on subjective well-being are the consequence of dissatisfaction with one's own beliefs about one's sexual self. There is an extensive and proven relationship between body image and sexual confidence in the contemporary Western culture. Physical attractiveness is one of the most important aspects of an intimate sexual relationship and sex appeal for women. Women tend to lose weight and maintain weight to increase their sexual attractiveness. Poor body image often is associated with the reduction of self-esteem in interpersonal communication, particularly in the relationship between two individuals with opposite genders. Intimate relationships are the central aspect of the lives of many women in different cultures (35).

3.2.2. The history of sexual abuse in childhood

The history of sexual abuse in childhood may affect the development of positive sexual self-concept and put individuals at high risk for sexual dysfunction (13, 18). Evidence shows the impact of sexual self-concept on sexual problems in women with a history of sexual abuse. Women with a history of child sexual abuse have a lower sexual self-concept compared with else (37). Moreover, women with sexual disorders have a weaker positive self-concept and stronger negative self-concept compared with those without sexual dysfunctions. Therefore, it is likely that sexual self-concept plays a role in the sexual function of abused women in childhood (38). Sexual interactions with coercion and abuse can cause negative emotions such as guilt, shame, anger, sorrow and frustration (27). The survivors of sexual abuse in childhood appear less romantic, sentimental or sensual compared with other women.

3.2.3. Mental health

Sexual self-concept can be affected by mental health, so that the negative feelings of sexual inadequacy are significantly higher in patients with schizophrenia and depression. They also report less sexual satisfaction. The fear of incompetence and negative emotions in patients with schizophrenia is higher resulting in considerable distress when trying to have sexual relationships. Patients with depressive disorders are unable to enjoy their lives and gradually lose interest in daily activities. Sexual self-concept in patients with depression is changed due to notable volition-drive deficit, low self-esteem, feelings of sexual inadequacy and worthlessness. Although patients with depression have more sexual activities at the onset of their disease than patients with schizophrenia, due to the reduction of sexual drive in the acute phase of the disease, they feel inadequacy that can lead to the inability to establish high quality sexual relationships. Other factors such as religious perspectives can affect sexual function and sexual self-concept in mentally ill patients. Religion as a social institution, including religious beliefs, ceremonies and religious activities, and a sense of belonging to a religious community plays a main role in the reconstruction and recovery in individuals with the mental illness (22, 39). Spirituality and religion compared with secular coping strategies, answer for incompetence and inadequacy in the human being. The purpose of religious

activities is getting closer to full strength, superior and true/absolute reality. Taking refuge in religion has a relationship with a better understanding of and compliance with the illness and drug use. Therefore, less religious patients experience more, the symptoms associated with depression (22, 39).

3.3. Social factors

3.3.1. Parents and peers

Parents are usually the first educators of the sexual identity to children and teach them about love, kindness and humility. Students also report that most information on sexuality is learned by their peers. Although parents and peers are the most important sources of information about sexuality, they are not the most effective sources (23). Those individuals who believe that their sexual relationships are approved by parents and peers are more likely to have higher positive sexual self-concept (9).

3.3.2. Media

The socialization of the sexual identity means providing information, attitudes and values about sexual issues. This is a complex and multidimensional process that occurs gradually over years using various sources. It encompasses different topics including the biology of reproduction, values and attitudes about dating, sexual relationships, love, emotional and romantic relationships. Sexual messages are transmitted through verbal, non-verbal, direct and indirect methods, and are often subtle, ambiguous and contradictory. The media, especially the television and magazines, are the main educational sources of youth's sexual relationships. Information from parents and peers is likely to expand the depth and impact of the media. Several theories about the vital role of television and other media in the education of sexual issues to young individuals are available. The availability, clearness and attractiveness are the reasons for the roles of the social media and programs on the education of sexual issues, the formation of attitudes, expectations and behaviors among young individuals (23). Facing repeated sexual orientation topics such as videos and images are associated with highly accepted stereotypes and casual attitudes towards sexual relationships, which increase the prevalence of sexual activities and experiences. Other social institutions such as churches and schools strongly influence the socialization of young people and acceptance of social attitudes, values and beliefs that can even affect the outcomes of the media and programs (23).

4. Conclusions

Sexual self-concept is dynamic and flexible, and affects the individual's attitudes towards sexuality, making decisions about it and interpretation of the information they receive about it. This study showed that biological, psychological, social factors affect sexual self-concept. The identification of the factors influencing sexual self-concept clarifies the causes for changes in attitudes, beliefs and behaviors in the field of sexual health. Also, policy makers can use such information to create policies for improving the positive aspects of sexual self-concept. The present study examined only articles in Persian and English languages. Also, quality assessment and assessment of risk of bias was not carried out. Despite these limitations, this study provides a comprehensive review of factors affecting sexual self-concept.

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Conflict of Interest:

There is no conflict of interest to be declared.

Authors' contributions:

All authors contributed to this project and article equally. All authors read and approved the final manuscript.

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